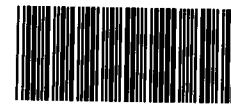


United States Environmental Protection Agency  
Region III  
POLLUTION REPORT

ORIGINAL



SDMS DocID 2210730

**Date:** Tuesday, December 11, 2007

**From:** Dominic Ventura

**Subject:**

Continuation of work  
Elkton Farm Firehole  
183 Zeitler Rd., Elkton, MD  
Latitude: 39.6292184  
Longitude: -75.8681150

<b>POLREP No.:</b>	53	<b>Site #:</b>	A3DH RV
<b>Reporting Period:</b>		<b>D.O. #:</b>	
<b>Start Date:</b>	1/31/2006	<b>Response Authority:</b>	CERCLA
<b>Mob Date:</b>	1/31/2006	<b>Response Type:</b>	Time-Critical
<b>Demob Date:</b>		<b>NPL Status:</b>	Non NPL
<b>Completion Date:</b>		<b>Incident Category:</b>	Removal Action
<b>CERCLIS ID #:</b>		<b>Contract #</b>	
<b>RCRIS ID #:</b>			

**Site Description**

**Work Mission Statement:**

Safely and efficiently investigate and remove Munitions and Explosives of Concern (MEC); Materials Potentially Possessing an Explosive Hazard (MPPEH), Munitions Debris (MD) and explosively contaminated soil(TNT) from the Elkton Farms Firehole Site, as defined in EPA's geophysical study.

**Current Activities**

The following stats apply since remobilization occurred on April 24, 2007:

1. Total Grids Cleared Gov't QA: 63
2. Total MEC found: 16,390 (MEC items include detonators, grenade fuze, blasting caps, tracer elements, incendiary bomblets, flares etc. etc.)
4. Total MD found: 2,141lbs.
5. Scrap metal found: 529lbs
6. Total Phase II processed soils: 70,024 cuft.

Specific grids that were worked (both Phase I and II) and passed QA this reporting period included: D3d,E4b,E4a,F4d.

Phase II work continues in association with Phase I work. Phase I is surface whereas Phase II is excavation and processing of soils thru the hydroaeration stations. Approximately 70,000 cuft of phase II soils have been processed since Phase II work commenced on 9/18/07.

An evaluation of the quantity of MEC items found on the screens within the Phase II soil hydro aeration separation process has revealed the following stats:

3168 items on the top screen  
1516 items on the bottom screen  
4684 total MEC items

Air monitoring for dust and particulate consistently reveals levels less than the TWA standard established for the site by OSHA. Air sampling for asbestos fibers has been completed on seven separate sampling events. Thus far no ACM fibers of any appreciable quantity have been detected.

EPA proposes to return to the site, after the holidays in mid January, 2008 and will initiate a revised Scope of Work (SOW) to address the two documented fireholes and the surficial MEC contamination, within the Phase II grids, south of the fireholes. Refer to POLREP 52 for description of aerial MEC contamination in Phase II areas as determined by exploratory line trenching. This SOW will consist of the excavation and scraping of Phase II soils and placement of such under a cap as defined by COMAR 26 (MDE regulation). The location of this staging and cap area will be along the southern portion of the site and will encompass approximately four grids. A total of 60 grids is anticipated to be moved in this fashion. EPA's decision to implement this approach is driven by the fact that the largest quantity of MEC item found on site are the 2 inch tracer element. Over 16,000 (greater than 98% of total site MEC) such items have been detected and are presently staged in 4, 55 gallon drums on site. There are two types of tracers found to date: Mk11 and MK14. By definition, the 2 inch diam cavity is comprised of an energetic filler material - phosphorous. This energetic material is not explosive. The Mk 11 tracer also has an integral self destruct element and contains a small amount of black powder. These items have survived the initial burn(s) and natural weathering over a period in excess of 50 years. In addition, due to extensive farming activities (over 50 years) these items have been dragged (moved, turned over) further exposing them to the natural elements. The tracers found to date have all undergone a vigorous inspection process to determine whether they can be classified as MEC or MD. This process consists of inserting a probe through the entire length of the central cavity to verify the presence of a filler (dirt or trace amounts of phosphorous). The presence of such, constitutes it's classification as MEC. The classification of a tracer as MEC is not an indication of the possible hazard presented by the item. It only shows that the presence of energetic filler could not be absolutely ruled out.

On December 6, 2007 EPA OSC conducted a site meeting with the property owner and MDE to discuss these findings and to present/discuss the revised SOW. A site walk thru accompanied these discussions. The EPA OSC will be meeting with the Elkton County Commissioners on December 18, 2007.

In addition to these findings, EPA proposes to perform hazard characterization tests including reactivity on a select quantity of the staged tracer elements. Similar type tests were previously performed on the smaller primers and dets. These tests will help EPA further determine the direct hazard posed by these tracers.

FOSC continues to conduct weekly meeting/conference call, which includes EPA, MDE, Start, GES, USA and RMC both field components and their offices. FOSC continues to participate in biweekly conference calls with MDE, ORC and site assessment regarding site progress and site issues.

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#### **Planned Removal Actions**

Christmas holiday demobe will occur on December 21. Remobe to the site will occur on January 14, 2008.

#### **Next Steps**

Sampling and analytical will be performed on the sediments in the sed pond and water in the frac tanks. The five point composite from the sed pond will be analyzed for nitro aromatics whereas the frac water sample will be analyzed for perc.

[www.epaosc.org/elktonfarmfirehole](http://www.epaosc.org/elktonfarmfirehole)